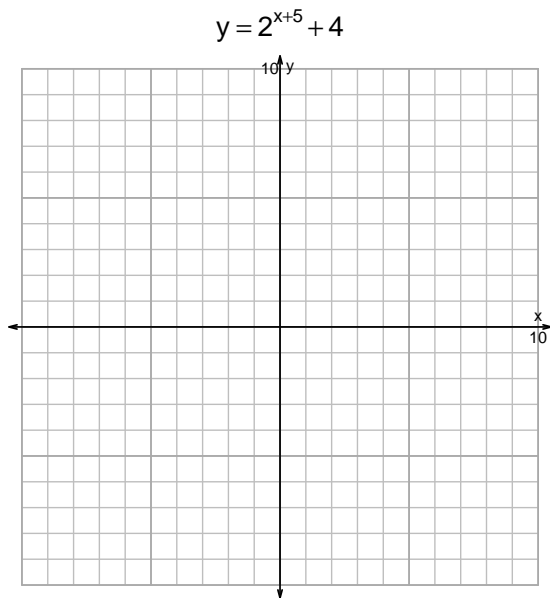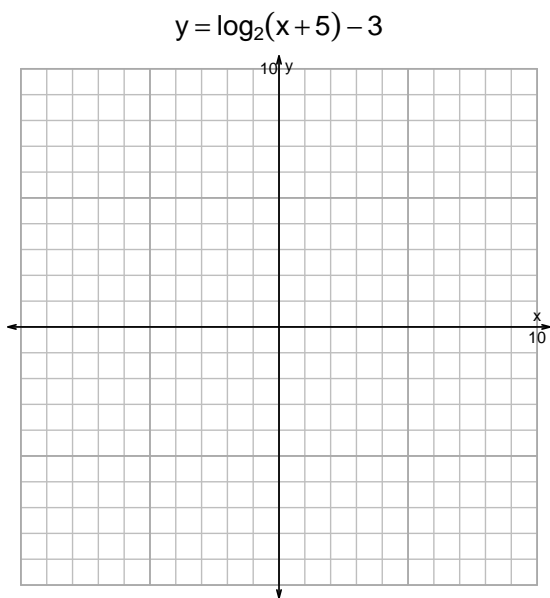Name: _____   Date: _____

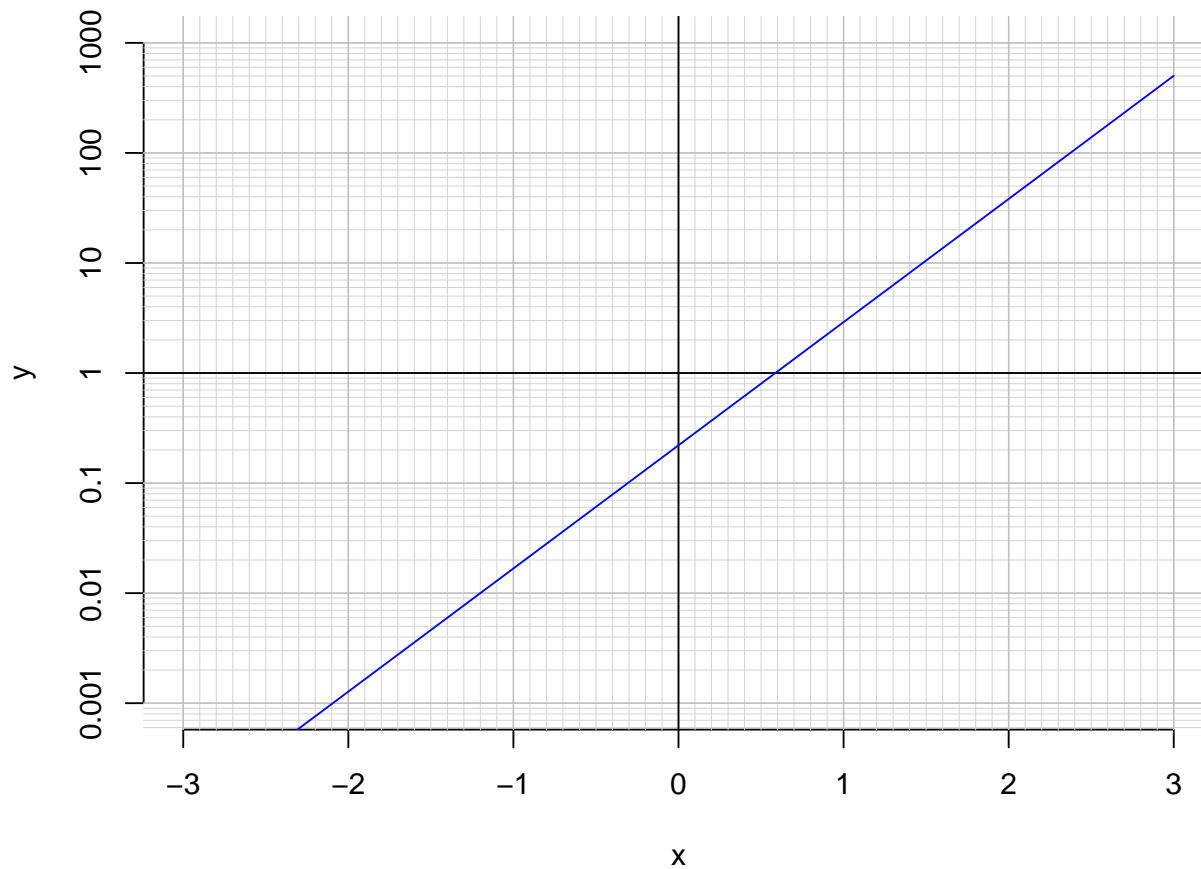## s18quiz: EXP LOG (Practice v108)

1. Graph $y = \log_2(x + 5) - 3$ and $y = 2^{x+5} + 4$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = \log_2(x + 5) - 3$$

$$y = 2^{x+5} + 4$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$11 = \left(\frac{3}{7}\right) \cdot 2^{5t/4}$$

3. An exponential function $f(x) = 0.221 \cdot e^{2.58x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(2.8)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(0.8)$.